

## REMARKS

Claims 13-42 are pending in the present application.

Claims 13, 15-23, 28-33 and 35-42 have been amended. No new matter is entered as a result of the amendments.

### Claim Rejections under 35 U.S.C. § 112

Claims 35-42 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Claims 35-42 have been amended thereby rendering the rejection moot. Claims 35-42 now positively recite the step of inserting the ultrafine hydrophobic latex particles in the elements listed.

Claims 13-42 are rejected under U.S.C. § 112, first paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13, 15-23 and 28 have been amended thereby rendering the rejection moot.

### Claim Rejections under 35 U.S.C. § 101

Claims 35-42 are rejected under 35 U.S.C. § 101 as being improper process claims.

Claims 35-42 have been amended thereby rendering the rejection moot. Claims 35-42 now positively recite the step of inserting the ultrafine hydrophobic latex particles in the elements listed.

### Claim Objections

Claims 36-38 are objected to as being improper form because a multiple dependent claim is not presented in proper form.

Claims 36-38 are each singly dependent claims depending from singly dependent claims. Applicants submit that the claims are proper and respectfully request withdrawal of the rejection as being improper.

The claims were not examined due to an improper objection. Applicant request initial examination on the merits.

### Claim Rejections under 35 U.S.C. § 102

Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Nishi et al. (USP 5,525,670).

Nishi et al. is cited as describing a coating composition made by emulsion polymerization of monomers. Nishi et al. is also cited as disclosing adjusting the molecular weight by mercaptan compounds or other compounds such as  $\alpha$ -methylstyrene dimer.

Applicants respectfully submit claim 13 does not specify molecular weight control but, instead, particle size is specified. One of skill in the art would have no basis for concluding that molecular weight control correlates to particle size control.

One needs only to review the data of the present application to realize that molecular weight control and particle size control are not correlated. For example, samples 10-12

demonstrate molecular weights of 48,090, 10,028 and 84,549 respectively, over an eight fold range of molecular weights, with very close particle size. Therefore, the position taken by the Office that Nishi et al. teaches molecular weight control has no predictable relationship to the claim limitation reciting particle size control.

Nishi et al. fails to disclose the particle sizes recited in claim 13 and therefore fails to obviate claim 13. Withdrawal of the rejection is proper and anticipated.

Claims 13-34 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over admitted prior art.

The rejection is based, in part, on the premise that one who performs the steps of a process must necessarily produce all of its advantages. If all of the steps were practiced Applicant would have no quarrel with this conclusion. In the instant case the Office has relied on the present disclosure to stretch the the reading of the prior art beyond what is taught, or even suggested, to form a conclusion that the same results would be obtained. It is improper to assume that different steps, or in the case of chemical reactions different concentrations, would lead to the same results. Absent some teaching to the contrary the Office has failed to describe where one of skill would arrive at the necessary teachings, or leadings, to even attempt to move towards the claimed invention. Absent such the rejection is improperly based on a hindsight reading and conclusion based thereon which is improper. Removal of the rejection is respectfully solicited.

Claim Rejections under 35 U.S.C. § 103

Claims 14-19 and 24-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishi et al. (USP 5,525,670) in view of "Polymer Chemistry" by Raymond B. Seymour.

Nishi et al. is cited as disclosing the concentrations and presence of components as instantly claimed excepting for the concentration of surfactant. The Office argues that the claim limitation includes zero. This is an improper read. Claim 13, from which all of claims 14-19 and 24-34 ultimately depend, recites a specific range of surfactants within which less than twice the micelle concentration resides. Therefore, the claim limitation can not include zero.

Seymour is cited as teaching specific compositions of surfactants. As pointed out previously<sup>1</sup> the concentration taught in Seymour is at least 100 times the critical micelle concentration.

The Office relies on a statistical analysis to concoct a subset of the reaction chamber to then conclude, without any semblance of support, that one would understand that the concentration should be less than twice CMC. The Office argues that only half of the micelles will contain growth chains at one time. Applicants respectfully request that the Office support this conclusion or withdraw it. Based on this unsupported statistical analysis the Office then concludes, again without support from the prior art, that one of skill in the art would have found it obvious that the concentration used by Nishi et al. and as taught by Seymour is adjusted to a concentration lower than twice CMC. How can one of skill in the art rely on Seymour teaching

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<sup>1</sup> Submission Under 37 CFR 1.114, filed 6/24/2004 in Serial No. 09/995,916 of which this case is a divisional

at least 100 times CMC find it obvious to use less than 2 times CMC? Absent the present disclosure one would have no basis to even attempt this statistical analysis even if it has merit.

Applicants respectfully submit that the rejection of claims 14-19 and 24-34 under 35 U.S.C. 103(a) as being unpatentable over Nishi et al. in view of Seymour et al. is improperly based on a hindsight reconstruction. The hindsight reconstruction requires an unsupported statistical analysis to selectively ignore the teachings of Seymour et al. to arrive at the claimed invention. This rejection is improper and withdrawal is respectfully solicited.

Claims 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obayashi et al. (USP 6,048,924).

Obayashi is cited as disclosing the preparation of a polymer by emulsion polymerization wherein molecular weight is controlled by chain transfer agents such as  $\alpha$ -methylstyrene dimer. As set forth previously, molecular weight control and particle size control are not correlated and therefore this teaching does not provide one of skill in the art with guidance regarding particle size. Therefore, one of skill in the art would not be inclined to consider Obayashi regarding particle size since there is no relevant teaching directed thereto.

Regarding subsequent claims Obayashi teaches a concentration of over 13 times CMC for Hitenol N-08 and about 130 times CMC for Hitenol HS-10. This teaches contrary to the recitation of claim 14. One of skill in the art would have no motivation to decrease the surfactant level to the level set forth in Claim 14 except in hindsight from the present invention.

The remaining claims depend from claim 13 and are patentable for at least the same reasons as claim 13. The Office has opined that the remaining properties of particles not disclosed in the references of Nishi and Obayashi would be presumptively inherently the same as those claimed. Applicants respectfully disagree. Nishi does not teach the particle size and provides no guidance for achieving the particle size. Obayashi fails to teach the surfactant concentration and therefore fails to teach a critical aspect of the invention that leads to the particle size and properties not previously achieved. The position of the Office is traversed.

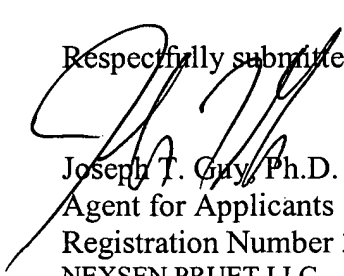
Applicants respectfully submit that the rejection of claim 13-19 under 35 U.S.C. 103(a) is traversed and withdrawal is respectfully solicited.

### CONCLUSIONS

Claims 13-42 are pending in the present application. Each rejection has been overcome by amendment or traversed by argument. The application is now believed to be in condition for allowance and notice thereof is earnestly solicited.

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Respectfully submitted,

  
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